

Sexually Transmitted Disease Surveillance 2004

**Division of STD Prevention
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This report is also available by Internet via the CDC home page at: <http://www.cdc.gov/std/stats/>

Related Websites

The following is a list of suggested websites related to information in this report:

- STD Surveillance 1993-2004:
http://www.cdc.gov/nchstp/dstd/Stats_Trends/Stats_and_Trends.htm
- STD Data on WONDER: <http://wonder.cdc.gov/sexu00.html>
- STD Fact Sheets: http://www.cdc.gov/std/healthcomm/fact_sheets.htm
- STD Treatment Guidelines: <http://www.cdc.gov/STD/treatment/>

Supplemental Reports

- 2004 Chlamydia Prevalence Monitoring Project: <http://www.cdc.gov/std/chlamydia2004/> (available first quarter 2006)
- 2004 Gonococcal Isolate Surveillance Project: <http://www.cdc.gov/std/GISP2004/> (available first quarter 2006)
- 2004 Syphilis Surveillance Project: <http://www.cdc.gov/std/Syphilis2004/> (available first quarter 2006)

Foreword

“STDs are hidden epidemics of enormous health and economic consequence in the United States. They are hidden because many Americans are reluctant to address sexual health issues in an open way and because of the biologic and social characteristics of these diseases. All Americans have an interest in STD prevention because all communities are impacted by STDs and all individuals directly or indirectly pay for the costs of these diseases. STDs are public health problems that lack easy solutions because they are rooted in human behavior and fundamental societal problems. Indeed, there are many obstacles to effective prevention efforts. The first hurdle will be to confront the reluctance of American society to openly confront issues surrounding sexuality and STDs. Despite the barriers, there are existing individual- and community-based interventions that are effective and can be implemented immediately. That is why a multifaceted approach is necessary to both the individual and community levels.

To successfully prevent STDs, many stakeholders need to redefine their mission, refocus their efforts, modify how they deliver services, and accept new responsibilities. In this process, strong leadership, innovative thinking, partnerships, and adequate resources will be required. The additional investment required to effectively prevent STDs may be considerable, but it is negligible when compared with the likely return on the investment. The process of preventing STDs must be a collaborative one. No one agency, organization, or sector can effectively do it alone; all members of the community must do their part. A successful national initiative to confront and prevent STDs requires widespread public awareness and participation and bold national leadership from the highest levels.”¹

¹ Concluding statement from the Institute of Medicine’s Summary Report, *The Hidden Epidemic: Confronting Sexually Transmitted Diseases*, National Academy Press, Washington, DC, 1997, p.43.

Preface

Sexually Transmitted Disease Surveillance, 2004 presents statistics and trends for sexually transmitted diseases (STDs) in the United States through 2004. This annual publication is intended as a reference document for policy makers, program managers, health planners, researchers, and others who are concerned with the public health implications of these diseases. **The figures and tables in this edition supersede those in earlier publications of these data.**

The surveillance information in this report is based on the following sources of data: (1) case reports from state and local STD programs; (2) prevalence data from the Regional Infertility Prevention Projects, the National Job Training Program (formerly the Job Corps), the Corrections STD Prevalence Monitoring Project, and the Men Who Have Sex With Men (MSM) Prevalence Monitoring Project; (3) sentinel surveillance of gonococcal antimicrobial resistance from the Gonococcal Isolate Surveillance Project (GISP); and (4) national surveys implemented by federal and private organizations.

The STD surveillance systems operated by state and local STD control programs, which provide the case report data for chlamydia, gonorrhea, syphilis and chancroid are the sources of many of the figures and all of the statistical tables in this publication. These systems are an integral part of program management at all levels of STD prevention and control in the United States. Because of incomplete diagnosis and reporting, the number of STD cases reported to CDC is less than the actual number of cases occurring in the United States population. Case report data for other STDs are not available because they are not nationally notifiable diseases.

Sexually Transmitted Disease Surveillance, 2004 consists of four parts. The **National Profile** contains figures that provide an overview of STD morbidity in the United States. The accompanying text identifies major findings and trends for selected STDs. The **Special Focus Profiles** contain figures and text describing STDs in selected subgroups and populations that are a focus of national and state prevention efforts. The **Detailed Tables** provide statistical information about STDs at the city, county, state, and national levels. The **Appendix** includes information on interpreting the STD Surveillance data used to produce this report, Healthy People 2010 STD objectives, GPRA goals, and STD surveillance case definitions.

Selected figures and tables in this document identify goals that reflect progress towards some of the Healthy People 2010 (HP2010) national health status objectives for STDs.¹ **Appendix** Table A3 displays progress made towards the HP2010 targets for STDs. These targets are used as reference points throughout this edition of *Sexually Transmitted Disease Surveillance, 2004*.

Any comments and suggestions that would improve the usefulness of future publications are appreciated and should be sent to Director, Division of STD Prevention, National Center for HIV, STD, and TB Prevention, Centers for Disease Control and Prevention, 1600 Clifton Road, Mailstop E-02, Atlanta, Georgia, 30333.

¹ U.S. Department of Health and Human Services. *Healthy People 2010*. 2nd ed. With Understanding and Improving Health and Objectives for Improving Health. 2 vols. Washington, DC: U.S. Government Printing Office, November 2000.

Acknowledgments

Publication of this report would not have been possible without the contributions of the State and Territorial Health Departments and the Sexually Transmitted Disease Control Programs and the Regional Infertility Prevention Projects, which provided surveillance data to the Centers for Disease Control and Prevention.

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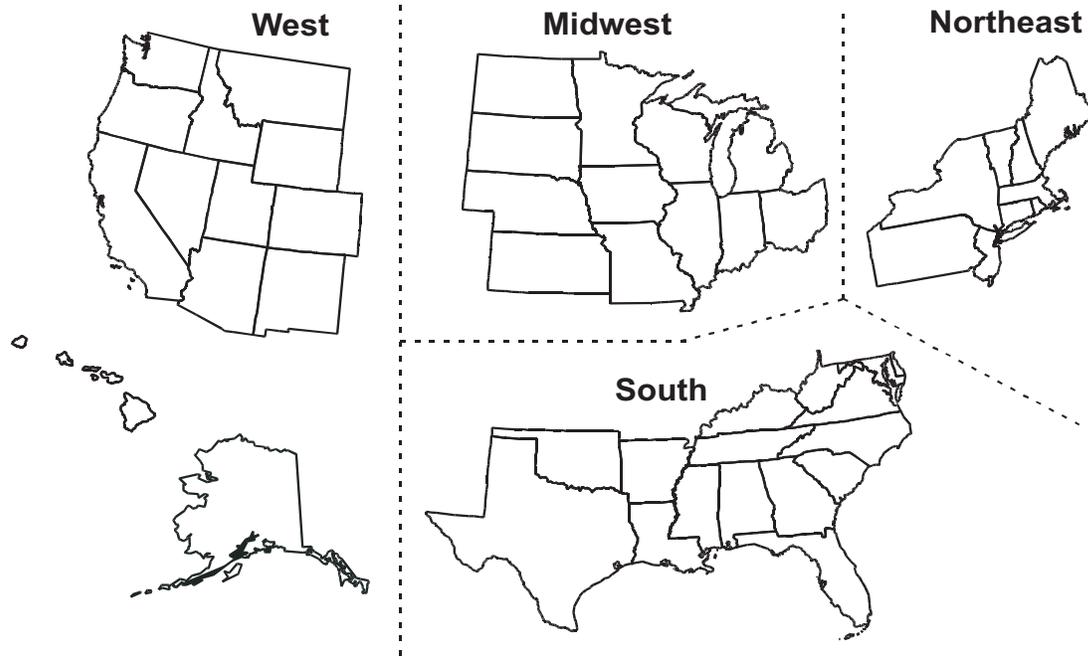
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Geographic Divisions of the United States



West

Alaska
 Arizona
 California
 Colorado
 Hawaii
 Idaho
 Montana
 Nevada
 New Mexico
 Oregon
 Utah
 Washington
 Wyoming

Midwest

Illinois
 Indiana
 Iowa
 Kansas
 Michigan
 Minnesota
 Missouri
 Nebraska
 North Dakota
 Ohio
 South Dakota
 Wisconsin

South

Alabama
 Arkansas
 Delaware
 District of Columbia
 Florida
 Georgia
 Kentucky
 Louisiana
 Maryland
 Mississippi
 North Carolina
 Oklahoma
 South Carolina
 Tennessee
 Texas
 Virginia
 West Virginia

Northeast

Connecticut
 Maine
 Massachusetts
 New Hampshire
 New Jersey
 New York
 Pennsylvania
 Rhode Island
 Vermont

National Overview of Sexually Transmitted Diseases, 2004

The logo on the cover of *Sexually Transmitted Disease Surveillance, 2004* is a reminder of the multifaceted, national dimensions of the morbidity, mortality, and costs that result from sexually transmitted diseases (STDs) in the United States. It highlights the central role of STD prevention in improving health among women and infants and in promoting HIV prevention. Organized collaboration among interested, committed public and private organizations is the key to reducing STDs and their related health burdens in our population. As noted in the report of the Institute of Medicine, *The Hidden Epidemic: Confronting Sexually Transmitted Diseases*,¹ surveillance is a key component of our efforts to prevent and control these diseases.

This overview summarizes national surveillance data on the three diseases for which there are federally-funded control programs: chlamydia, gonorrhea, and syphilis. Several observations for 2004 are worthy of note.

Chlamydia

In 2004, 929,462 cases of genital *Chlamydia trachomatis* infection were reported to CDC (Table 1). This case count corresponds to a rate of 319.6 cases per 100,000 population, an increase of 5.9% compared with the rate in 2003. Rates of reported chlamydia infections among women have been increasing annually since the late 1980s when public programs for screening and treatment of women were first established to avert pelvic inflammatory disease and related complications. Chlamydia screening and reporting are likely to continue to expand further in response to the Health Plan Employer Data and Information Set (HEDIS) measure for chlamydia screening of sexually active women 15 to 25 years of age who are provided medical care through managed care organizations.² The continued increase in chlamydia case reports in 2004 most likely represents a continued increase in screening for this infection and also increased use of more sensitive chlamydia screening tests than in prior years.

Chlamydia Screening and Prevalence Monitoring in Special Populations

Data from multiple sources on prevalence of chlamydia infection in defined populations have been useful in monitoring disease burden and guiding chlamydia screening programs:

- In 2004, the median state-specific chlamydia test positivity among women 15 to 24 years of age who were screened at selected family planning clinics in all states, the District of Columbia, Puerto Rico, and the Virgin Islands was 6.3% (range 3.2% to 16.3%) (Figure 8).
- In 2004, the median state-specific chlamydia test positivity among 15- to 24- year old women who were screened at selected prenatal clinics in 25 states, Puerto Rico, and the Virgin Islands was 6.8% (range 3.1% to 17.6%) (Figure 7).
- For economically-disadvantaged women 16 to 24 years of age who entered the National Job Training Program in 2004 from 38 states and Puerto Rico, the

median state-specific prevalence was 9.7% (range 4.4% to 17.3%) (Figure M). Among men entering the program in 2004 from 47 states and Puerto Rico the median state-specific chlamydia prevalence was 7.3% (range 0.8% to 13.0%) (Figure N).

- For adolescent women entering 56 juvenile detention centers, the median chlamydia positivity by facility was 14.0% (range 2.4% to 26.5%) (Table AA). Among adolescent men entering 81 juvenile detention centers, the median chlamydia positivity was 5.8% by facility (range 1.0% to 27.5%) (Table AA).

Although these data on prevalence are not entirely comparable because of differences in the populations screened, in the performance characteristics of the screening tests, and variations in screening criteria, they provide important information on the continuing high burden of disease in the United States.

Gonorrhea

In 2004, 330,132 cases of gonorrhea were reported in the United States. Following a 74.3% decline in the rate of reported gonorrhea from 1975 (467.7 cases per 100,000 population) to 1997 (120.2 cases per 100,000 population), overall rates appeared to plateau. Since 2000, however, the gonorrhea rate has decreased 15.2% to the current rate of 113.5 per 100,000 population (Table 1). Although this is the lowest gonorrhea rate the United States has ever reported, the 2004 rate for gonorrhea considerably exceeds the Healthy People 2010 (HP2010) target of 19 cases per 100,000 population.

The rate among women was slightly higher (116.5 per 100,000 population) than the rate among men (110.0 per 100,000 population) for the third straight year (Figure 14). As with chlamydia, rates of gonorrhea in women are particularly high in 15- to 19-year-olds, and in men, are highest in the 20- to 24-year age group (Figure 16 and Table 20). Since 2000, the overall rate of gonorrhea among 15- to 19-year-olds has decreased by 15.4%. Similar to previous years, in 2004, African-American 15- to 19-year-old females had the highest gonorrhea rate of any age and race/ethnic group (2,790.5 cases per 100,000 population) (Table 21B). However, gonorrhea rates among both African-American men and women decreased from 2000 through 2004 (22.2% and 15.6%, respectively). In contrast, gonorrhea rates among both white men and women have increased between 2000 and 2004 (20.2% and 19.0%, respectively).

Gonorrhea in Special Populations

In 2004, data on gonorrhea prevalence in defined populations were available from several sources. These data showed a continuing high burden of disease in adolescents and young adults in some parts of the United States.

- For 16- to 24-year-old women entering the National Job Training Program in 33 states and Puerto Rico in 2004, the median state-specific gonorrhea prevalence was 2.4% (range 0% to 6.4%). Among men entering the program from 8 states, the median state-specific gonorrhea prevalence was 3.7% (range 1.0% to 5.5%).
- Among women entering 34 juvenile corrections facilities the median prevalence was 4.5% (range 0% to 16.6%); the median prevalence for men entering 49 juvenile corrections facilities was 0.8% (range 0% to 18.2%).

- Among women entering 26 adult corrections facilities, the median positivity was 3.0% (range 0% to 8.4%). In men, the median positivity was 2.6% (range 0% to 33.8%) in 27 adult corrections facilities.
- Among men who have sex with men attending 7 STD clinics, the median positivity was 15% (range 11-17%).

Antimicrobial Resistance

The Gonococcal Isolate Surveillance Project (GISP) was established in 1986 to monitor trends in antimicrobial susceptibilities of strains of *Neisseria gonorrhoeae* in the United States. Isolates are collected from the first 25 men with urethral gonorrhea attending selected STD clinics each month in 28 cities.

There is considerable geographic variation in the prevalence of fluoroquinolone-resistance within the United States. Outside of Hawaii and California, 3.6% of *N. gonorrhoeae* isolates demonstrated resistance. In Honolulu, California and Washington the proportion of GISP isolates that were resistant to ciprofloxacin stayed relatively steady or increased during 2004, while increases in resistance were seen in other areas of the continental U.S., most notably in Denver, Miami, Minneapolis, and Phoenix.

The proportion of GISP isolates among men who have sex with men (MSM) that were resistant to ciprofloxacin increased again in 2004 to 23.9%, up from 15% in 2003. The proportion of resistant isolates among heterosexuals nearly doubled in 2004, increasing from 1.5% in 2003 to 2.9% in 2004. In 2004 CDC recommended that fluoroquinolones no longer be used to treat gonorrhea among MSM.³ See **Appendix** for more information on GISP.

Syphilis

The rate of primary and secondary (P&S) syphilis reported in the United States decreased during the 1990s and in 2000 was the lowest since reporting began in 1941. The low rate of syphilis and the concentration of the majority of syphilis cases in a small number of geographic areas led to the development of the National Plan to Eliminate Syphilis from the United States, which was announced by the Surgeon General in October 1999.⁴ The rate of P&S syphilis in the United States declined by 89.2% from 1990 through 2000. However, the rate of P&S syphilis has increased each year since 2001, primarily among men. In 2004, P&S syphilis cases reported to CDC increased to 7,980 from 7,177 in 2003, an increase of 11.2%. The number of cases in women increased for the first time in over a decade, though only slightly. Cases of congenital syphilis continued to decline; 353 cases of congenital syphilis were reported in 2004, down from 432 in 2003.

Despite national progress toward syphilis elimination among women and African-Americans, syphilis remains an important problem in the South and in areas with large populations of MSM. Between 2003 and 2004 the rate of P&S syphilis among men increased from 4.2 to 4.7 cases per 100,000 population. The overall rate in women remained the same, 0.8 cases per 100,000 population.

While syphilis elimination efforts have successfully focused on heterosexual minority populations at risk for syphilis, recent increases in syphilis among MSM highlight the importance of continually reassessing and refining surveillance, prevention, and control strategies.

Although wide disparities exist in the rates of STDs among racial and ethnic groups, there has been a reduction in these differences for syphilis over the past five years. The P&S syphilis rate for 2004 among African-Americans was 5.6 times the rate among whites, reflecting a substantial decline from 1999, when the rate among African-Americans was 29 times greater than that among whites (Table 34B). While this has reflected decreasing rates among African-Americans, it also reflects significant increases among white men during the past 4 years. In 2004, however, increases were observed among both African-American men (14.1 cases per 100,000 population, up from 11.5 in 2003) and African-American women (4.3 cases per 100,000 population, up from 4.2 in 2003) for the first time in over a decade. Increases were also observed among white men and women.

¹ Institute of Medicine. *The Hidden Epidemic: Confronting Sexually Transmitted Diseases*, Committee on Prevention and Control of Sexually Transmitted Diseases, National Academy Press, Washington, DC, 1997.

² National Committee for Quality Assurance (NCQA). *HEDIS 2000: Technical Specifications*, Washington, DC, 1999, pp. 68-70, 285-286.

³ Centers for Disease Control and Prevention. Sexually transmitted diseases treatment guidelines 2002. *MMWR* 2002;51 (No. RR-6).

⁴ Division of STD Prevention. *The National Plan to Eliminate Syphilis from the United States*. National Center for HIV, STD, and TB Prevention, Centers for Disease Control and Prevention, 1999.